

2005 Annual Report



# IN 2005, SEATTLE CITY LIGHT CELEBRATED 100 YEARS of PROVIDING ELECTRICITY to the PEOPLE of SEATTLE.

In January 1905, Seattle City Light's Cedar Falls plant began generating power for city street lamps. It was the first municipally owned hydroelectric power plant in the United States.

Later that year, City Light booked up its first residential customer: the Rev.

J.M. Wilson, pastor of the Westminster Presbyterian Church.

Among City Light's founders were two giants of the last century, R.H. Thompson and J.D. Ross. The former is responsible for nearly all the infrastructure in Seattle save the Space Needle and Interstate 5.

Against incredible odds, the latter developed the upper Skagit and then went on to be the first executive of the Bonneville Power Administration.

In the 1920s, City Light began operating the first of its three

hydroelectric plants on the Skagit River. In 1947, long before environmentalism caught on, City Light funded the Skagit hatchery, designed to preserve salmon and steelhead runs on the river.

Boundary Dam, with its powerhouse built inside an adjacent mountain, started operating in 1967. In 1976, the Seattle City Council rejected investing in Washington Public Power Supply System (WPPSS) nuclear power plants four and five and opted instead for conservation to offset future power needs.

The Skagit dams were relicensed in 1991, with precedent-setting protections for fish and wildlife.

By 1998, City Light's conservation programs saved enough energy to

power one out of every eight Seattle homes. In 2002, the utility became the largest purchaser of wind power among the nation's public utilities. In 2005, City Light was the first large utility to offset 100 percent of its emissions of greenhouse gases.

In its first 100 years, City Light built major hydroelectric facilities that now meet about 50 percent of our power needs, developed one of the nation's premier conservation and renewable resource programs, and began caring for fishery and other environmental resources long before such practices were common in the industry. The utility carries these traditions proudly into its next century of service. \*





City Light line crew, circa 1905



Appliance repair, circa 1930

# MESSAGE from the SUPERINTENDENT



"WE WANT SEATTLEITES

IN 2105 TO MARVEL AT

CITY LIGHT'S SUCCESS IN

MEETING THE PREVIOUS

CENTURY'S CHALLENGES

WHILE CONTINUING TO

PROVIDE ENVIRONMENTALLY

RESPONSIBLE, RELIABLE, SAFE,

LOW-COST ELECTRICITY."

Jorge Carrasco, Superintendent Seattle City Light



J. D. Ross

### A CENTURY of SERVICE

C ity Light is central to the history of Seattle and to the development of public power in the Pacific Northwest.

We begin our second hundred years responding to the last great challenge of the previous century – the energy crisis of 2000-2001. This event resulted in \$600 million of unplanned energy costs, significant additional debt, delayed investments in infrastructure and maintenance, and major challenges relating to managing water supply and energy price risks.

Wisely, and with the help of valuable insight from the independent Seattle City Light Advisory Board, the Mayor and City Council are taking a long-term view of their utility's financial health and stability. As 2005 began, we had paid off \$300 million in short-term debt that we incurred buying very expensive market electricity during that period, and we are now paying down long-term debt. Our rates have remained stable since the energy crisis; in fact, there has been a slight drop in rates over the last several years. At the same time, our operating cash reserves have grown, and bond-rating agencies have upgraded our financial outlook.

In our centennial year, we are in the process of transforming City Light into a high-performance organization dedicated to customer satisfaction, employee growth, and operational excellence. In 2005, we attracted new leadership to the utility that will help us reach our ambitious goals and deal with a host of challenges, both internal and external:

- Because of skilled-labor shortages and future retirements, we must protect our capacity to meet our customers' needs by placing greater emphasis on workforce planning, enhanced recruitment and apprenticeship training, and succession planning. These initiatives become even more important as 50 percent of our work force becomes eligible for retirement over the next five years. Equally important, we must pay more attention to improved organizational and individual performance if we are to remain competitive in our industry and with our peers.
- I Blessed with access to a precious natural resource— water—and the valuable facilities that turn falling water into energy, we must very carefully manage both. Hydropower is a low-cost but volatile commodity that requires

- vigilant risk management. We must take care of our physical assets and protect our investment in crucial infrastructure.
- I Following the wise decisions of Northwest policymakers not to move toward retail electricity deregulation, we must continue our commitment to the vertically-integrated utility model that has served our customers so well, recognizing the risks and capitalizing on the opportunities that this model presents.
- In the face of competitive energy markets, and with electricity being generated and consumed at far-flung locations throughout the region, we must pay attention to the reliability of our regional transmission system. Our region needs an electrical grid that can accommodate our growth and be managed as an integrated system.
- I The unprecedented pace of technological change means that we must be open to new ideas and technologies that will fundamentally change the way energy is produced and transported. Seattle did not light its first bulb until seven years after Thomas Edison patented the technology. In the 21st century, seven years can render a new technology obsolete.
- I Finally, we must build a new energy strategy in the face of enormous pressure on our environment, global warming, escalating energy prices, and the predicted end of the era of fossil fuels.

We welcome the challenges ahead. The next 100 years offer opportunities to build upon a legacy of innovation. We want Seattleites in 2105 to marvel at City Light's success in meeting the previous century's challenges while continuing to provide environmentally responsible, reliable, safe, low-cost electricity.

In this report, we will take a close look at 2005 and share with our customers the initiatives we have undertaken to meet current challenges and anticipate what's ahead. In a pivotal year, we offer a look at our past, present and future. We hope you enjoy it. \*

Age Canare

Jorge Carrasco

### SERVING CUSTOMERS WELL



# FOCUSING on CUSTOMERS and COMMUNITY

From one customer in 1905 to almost 376,000 today; from one residential connection to 14 substations, 163 feeder lines and 2,500 miles of distribution circuit: In 2005, customer service has become more complex—and more important—than ever before for City Light.

Much of the utility's work in 2005 focused on meeting the everyday challenges of energy delivery and system maintenance, combined with initiatives to explore new technology and better business processes to improve customer service.



One such initiative is the electric service installation project, a customer-driven, consultant-supported project to identify and analyze the workflow, business processes and technology applications associated with providing a new or enlarged electrical service. City Light is looking at everything in this process, from the customer's initial request for information to production of the first electric bill.

The project team identified a host of issues, including the number of "touches" involved as each request winds its way through the



System Control Center

system. A touch can be a form handed from one employee to another, or e-mail sent or forwarded. City Light also established a ninemember customer steering committee—representing large and small commercial establishments, housing developers, schools and hospitals—that provided an objective assessment of the installation process as it existed. Working with the steering committee, City Light reviewed the way other utilities and organizations successfully manage customer requests.

City Light will implement the first phase of the new, streamlined process by late 2006, with full implementation scheduled for 2008.

# SUPPORTING GROWTH and ECONOMIC VITALITY

In 2005, major transportation and redevelopment projects in the Seattle area produced a lot of work for the people who build, operate and maintain City Light's power distribution system.

In downtown Seattle, south Seattle and suburban Tukwila, City Light relocated electrical facilities to keep pace with Sound Transit's light-rail project. The Central Link light rail project is a 14-mile system between downtown Seattle and Sea-Tac Airport, scheduled to begin service in 2009. By the end of 2005, City Light had completed more than 50 percent of underground work along



two miles of the rail alignment. The utility also built or reconstructed several electrical vaults along Third Avenue and Pine Street in record time to accommodate Sound Transit's work in the downtown Seattle transit tunnel.

In the burgeoning South Lake Union biotechnology hub, City Light completed an innovative cooling project at its Broad Street Substation. The project increases electrical capacity and reliability in the fast-growing area. The utility also has plans in place to relocate network facilities along the alignment of the city's South Lake Union streetcar, scheduled to begin operating in 2007.

In coordination with the city and state's enormous Alaskan Way Viaduct replacement project, City Light is hard at work on conceptual engineering and development-design criteria as part of the environmental impact process. City Light has transmission and feeder lines and other equipment either on the viaduct or buried within the right-of-way and will need to relocate and upgrade this infrastructure.

Finally, the utility built and energized a 12.5-megawatt service for Princess Cruises at the Port of Seattle's Pier 25. The facility enables cruise ships to "plug in" and use clean electricity to power their hotel functions while in port, so they don't have to continually run polluting diesel engines. Seattle's port was only the second in the world to provide this option to cruise ships.

### **AUTOMATED METER READING**

City Light's Account Executive Office is managing two automated meter reading pilot projects—another example of how the utility meets the challenge of adopting new technology to improve the way it does business.

One pilot, in the South Lake Union/Denny Triangle area north of downtown, will equip new homes and businesses with "smart" meters that transmit data by radio and can be read on demand. City Light expects the meters to provide consumption data that's more useful to both the utility and the customer and helps produce more accurate bills.

The Seattle Housing Authority's High Point residential development is the site of the other pilot. Automated meters will track water and electricity consumption in residential units on a monthly, rather than bimonthly, billing cycle. City Light will track the experience to see if the more frequent cycle with smaller payments is more convenient for low-income customers.

### SYSTEM CONTROL CENTER

City Light's System Control Center is the utility's nerve center, monitoring generation, transmission and distribution 24 hours a day, seven days a week, and dispatching crews to outages and other problems. Its function is crucial to City Light's meeting the challenge of maintaining a reliable system.

The North American Electrical Reliability Council (NERC) conducted an audit of the utility in 2005 to determine its readiness to maintain safe and reliable operations. The audit was generally complimentary but pointed out areas where City Light should improve its practices to ensure greater reliability. NERC noted, for example, that the utility had not adequately tested its

protective relays at transmission substations, was not current with its tree trimming intervals, and needed to update some real-time contingency software applications. City Light has made a major effort since the audit to address operational equipment maintenance needs.

The audit also praised the System Control Center for a competent, committed staff and for many of its processes and procedures.

### **CUSTOMER ACCOUNTS**

City Light employees responsible for billing customers faced some unusual challenges in 2005. They issued \$16.1 million in refunds and billing credits, stemming from a court ruling the previous year. Since 2000 City Light had been charging customers for streetlight maintenance, but the court said that streetlight maintenance should be a cost of general government rather than a utility expense. City Light received reimbursement for the credits from the City of Seattle's general fund.

City Light also distributed \$3.96 million in credits to commercial and industrial customers from its share of an antitrust settlement negotiated by the state of Washington with Duke Energy, El Paso Energy, and Williams Energy. City Light's residential conservation staff worked with the Seattle Foundation to distribute \$1 million in financial assistance and energy-efficiency measures for low-income customers. \*\*



Night streets with Hotel Gorman, circa 1920



# PRODUCING POWER – PROTECTING the ENVIRONMENT



CITY LIGHT IS

REDEVELOPING ITS

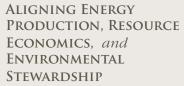
LONG-TERM RESOURCE

PLANNING AND IN 2005

LAUNCHED ITS FIRST

INTEGRATED RESOURCE

PLAN IN EIGHT YEARS.



City Light took several steps in 2005 to meet the challenge of managing resources, risk and physical assets.

### RISK MANAGEMENT

In 2005, City Light began a comprehensive overhaul of its risk management process. Learning from the 2000-2001 energy crisis, observing the evolution of the energy marketplace, and acknowledging its current portfolio, City Light understands that it faces greater volatility and financial risk than ever before. Depending on market and water conditions in any year, City Light's wholesale revenues could range from zero to \$200 million. City Light is taking several significant steps to manage this risk effectively.

The utility began testing alternative hydropower forecasting models, developed a new model for determining water-supply confidence levels, and implemented hedging strategies designed to increase wholesale revenue from surplus sales. To conform to industry best practices, City Light's finance group began independently monitoring power management's risk-management activities in 2005.



Good risk management, an essential function for a hydro-based utility, will help provide revenue, rate and resource stability and avoid major impacts to the system like those suffered in 2000-2001. In addition, City Light is optimizing the value of surplus capability in its existing resource portfolio. For example, in 2005 the utility sold the 2006 surplus output of the Lucky Peak project to power marketer Morgan Stanley. This low-risk transaction is expected to produce gross revenues of \$22 million, \$3.2 million more than other sales alternatives.

### RESOURCE PLANNING

City Light is redeveloping its long-term resource planning and in 2005 launched its first Integrated Resource Plan (IRP) in eight years. Most utilities abandoned IRPs in the 1990s in response to the growing call for deregulation. Now, with the re-emergence of the integrated utility model, such planning is critical.

In 2005, City Light developed a scope of work for its IRP, hired a director and staff, acquired a state-of-the-art software model,



Salmon and hydropower thrive on the Skagit River



and began a series of stakeholder meetings. The current plan will be completed in 2006, and an updated plan will be developed every two years.

Regarding resources in the shorter term,
City Light made power production and
power marketing part of the same business
unit in 2005. That means key work, like
generation outage planning and upgrades,
now informs fundamental daily business
activities like serving load and making
wholesale transactions. In other words, the
people who buy and sell power every day
now have direct access to information about
the utility's current and future generation
capabilities.

### **WORKING WITH BONNEVILLE**

As part of City Light's re-emergence as a regional leader, the utility worked hard to improve its relationship with the Bonneville Power Administration (BPA), the agency that markets energy from the Columbia River system to customers in the Northwest.

Cooperation with BPA is crucial to meet the challenge of improving the regional transmission grid. In 2005, City Light, BPA and other transmission operators made significant progress toward forming a new regional transmission organization for the Pacific Northwest known as ColumbiaGrid. Building on prior efforts, the new entity will result in a coordinated strategy for operating and expanding the region's vital transmission system to ensure that it meets the growing, shifting needs of the utilities it serves.

City Light played a key role in BPA's Power Function Review that helped reduce Bonneville's own power costs by more than \$100 million and resulted in a 2 percent rate reduction for City Light customers. City Light has also been involved in BPA's 2007-2009 power-rates process, and with the agency's

Regional Dialog, which will determine the nature of City Light's power purchases from BPA over the next 20 years.

### **CONSERVATION**

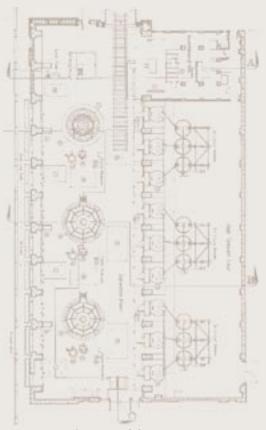
Since 1977, City Light has actively pursued conservation as an alternative to new generation. Programs provide conservation information and financial incentives that encourage energy-efficient equipment and practices in homes and businesses. In 2005, energy savings from active measures reduced City Light's system load by 10 percent (970,249 megawatt-hours), enough to power 109,000 homes for that year.

Conservation benefits the environment by delaying the need for new power plants, reducing air pollution and greenhouse-gas emissions from fossil-fuel plants. In 2005, conservation reduced the release of carbon dioxide by more than 420,000 tons, equal to removing 83,910 vehicles from the region's roads for the next 18 years. Meanwhile, conservation customers reduced their City Light bills by \$63 million in 2005.

City Light moved conservation services to the power resource side of the utility in 2005. The utility now aligns conservation, functionally as well as philosophically, with energy supply.



Skagit bydroelectric project construction, circa 1940



Gorge Powerhouse original plan



Monitoring stream flows ensures bealthy salmon runs



### ENVIRONMENTAL STEWARDSHIP

In 2005, City Light continued to develop innovative responses to the challenge of producing power in a fragile environment. With increased national and regional interest in renewable portfolio standards, along with global warming, fish protection, and other issues, City Light's long-standing commitment to environmental responsibility put it well ahead of the curve.

## ZERO NET GREENHOUSE-GAS EMISSIONS

In November, Mayor Greg Nickels announced that City Light had become the first large electric utility in the country to eliminate or offset all harmful greenhousegas emissions the utility's operations and power purchases emit into the environment. Together with several local greenhouse-gas mitigation projects, the utility reached its goal of "zero net emissions" when it signed a contract to purchase 300,000 metric tons of greenhouse-gas emissions offsets from an industrial process.

Since 2000, City Light has been working to meet all new electrical demand with cost-effective conservation and renewable resources. Also in 2000, the Seattle City Council set the long-term goal of zero net greenhouse-gas emissions. City Light emissions come from power purchases and its own operations, including the use of vehicles and heating of facilities.

### NORTH CASCADES ENVIRONMENTAL LEARNING CENTER

In October 2005, City Light helped dedicate the North Cascades Environmental Learning Center (NCELC). Located on the north shore of Diablo Lake in the heart of City Light's Skagit Hydroelectric Project, the center is the centerpiece of City Light's Skagit environmental mitigation program. The 16-building complex includes a library, multimedia classrooms and lodging for more than 50 people. It is a living laboratory, teaching people of all ages to value and protect the North Cascades wilderness.

The NCELC is the product of a partnership among City Light, the National Park Service, and the North Cascades Institute.

### HABITAT PRESERVATION

In November, City Light saved 235 acres of Skagit farmland and riverfront property from any future development by granting a conservation easement to the Skagit Land Trust. The easement is a permanent landholder preservation agreement, which ensures that the shoreline and broad floodplain habitat is protected. The property, Iron Mountain Ranch, encompasses two miles of shoreline on the south bank of the Skagit River, seven miles west of Concrete, Wash. This reach of the river includes some of the most important spawning areas for chinook salmon and steelhead in the lower and middle Skagit.





Prudent management ensures bealthy salmon runs on the Skagit

#### GREEN UP

City Light launched its Green Up program in 2005, giving customers an opportunity to demonstrate their commitment to fight global warming and support the development of renewable energy resources. The program allows customers to voluntarily "green up" a percentage of their electrical consumption, with these contributions used to purchase renewable energy or the environmental attributes from renewable energy products.

City Light and Unico Properties introduced the Green Up program in August. Unico operates several buildings in downtown Seattle, including Rainier Tower, the Skinner, Cobb and IBM buildings, Financial Center, and Puget Sound Plaza. The company is greening up 8 percent of its annual electricity needs, or about 3,200 megawatthours per year.

### **GREEN RIBBON COMMISSION**

Mayor Nickels appointed his Green Ribbon
Commission on Climate Protection in
February 2005. The commission, which
included City Light Superintendent Jorge
Carrasco among its 18 members, was
charged with developing local solutions
to global climate disruption, providing a
"greenprint" for other communities, and
beginning development of a climate action
plan to meet or beat the goals of the Kyoto
Protocol in Seattle. Mayor Nickels also
challenged other cities to join his initiative
and provide an effective local response to an
issue that lacks a federal commitment. \*\*



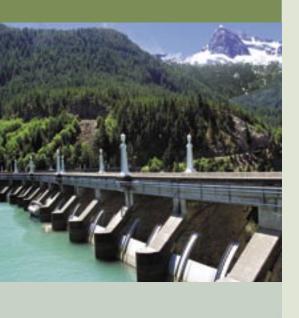
Service Area

Principal Substations

Future Substations



# MANAGING MONEY and RISK



### CLEAR PROGRESS TOWARD FINANCIAL HEALTH

 $B_{\rm Y}$  the end of 2005, City Light had made steady progress toward recovery from the 2000-2001 energy crisis and was following a clear roadmap to a solid financial future. The utility had turned the corner but had not quite reached home.

City Light reported a record net income of \$81.9 million in 2005. Operating cash at the end of 2005 totaled \$141.9 million, an increase of \$81.2 million from 2004. This cash amount results from more conservative financial policies adopted by the City Council. It is being used to fund capital work and to reduce the significant amount of debt carried by the utility. Net short-term revenue from sales of surplus power was \$87.4 million, in a poor water year.

It was a good year, financially. But in 2004, the utility's \$13.8 million net income had ended four straight years of losses—totaling more than \$135 million—that began with the Western energy crisis in 2000. In spite of those difficult years, City Light has maintained stable rates since 2001, putting it in position to move toward the crucial goal of paying down long-term debt.

In 2005, the utility increased its debt-coverage ratio from 1.52 (2004) to 1.86 and reduced long-term debt by \$57.5 million, or 3.9 percent. City Light issued no new debt in 2005 to fund capital expenditures and made progress toward meeting the goal of 60 percent debt-to-capitalization by 2010.

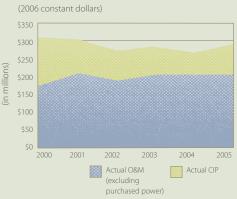
### FINANCIAL POLICIES

Acting on recommendations from the Mayor and the utility's Advisory Board, the Seattle City Council adopted new financial policies for City Light in 2005.

The conservative policies recognize the severe volatility in City Light's wholesale revenues due to the vagaries of water and market conditions. They direct rates to be set so that there is a 95 percent probability each year that at least some contribution would be made to the capital budget from net current revenues. Over time, that contribution is expected to average about \$100 million, or roughly 60 percent of the annual capital budget. The overall ratio of debt to capital gradually will be reduced from more than 90 percent, following the energy crisis, to 60 percent by 2010. Since the ratio is about 78 percent today, much work remains. The policies also establish a \$25 million contingency reserve using proceeds from an \$87 million bond reserve, with the remainder used to further reduce debt.



# ACTUAL SPENDING TRENDS FOR CONTROLLABLE COSTS



Downtown Seattle skyline

### **ADVISORY BOARD**

With the end of 2005, legislation that created the City Light Advisory Board expired. Established in 2003 following the energy crisis, the board provided expert, independent guidance to the utility, the Mayor, and the City Council in the areas of risk management, finance and power markets, issue analysis, policy development, long-range planning and other areas. The board was a major force in developing the utility's new financial policies, and City Light is indebted to the board members for their hard work and valuable insight.

Members: Carol S. Arnold; Randall W. Hardy; Jay F. Lapin; Maura L. O'Neill (until March 2004); Sara Patton; Gary Swofford (appointed in July 2004); Donald Wise.

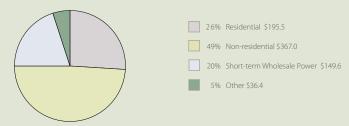
### **RATES**

In November, City Light rolled back rates slightly, thanks to a drop in BPA wholesale-power costs. Bills dropped about 2 percent for residential customers and about 2.6 percent for high-demand industrial customers. The utility's rates have gone down 4 percent since March 2002. \*\*



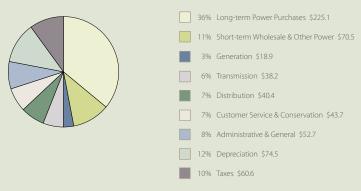
### 2005 OPERATING REVENUES

(in millions = \$748.5)



### 2005 OPERATING EXPENSES

(in millions = \$624.6)



### 2005 HIGHLIGHTS (Unaudited)

Financial (in millions)	2005	2004	% Change
Total operating revenues	\$ 748.5	\$ 777.9	(3.8)
Total operating expenses	624.6	710.0	(12.0)
Net operating income	123.9	67.9	82.5
Investment income	5.7	2.5	100+
Interest expense, net	(73.6)	(76.3)	(3.5)
Other income (expense), net	(0.3)	1.8	(100+)
Fees and grants	26.2	17.9	46.4
Net income	\$ 81.9	\$ 13.8	100+
Debt service coverage, all bonds	1.86	1.52	22.4

Energy	2005	2004	% Change
Total generation	5,544,793 MWh	6,019,707 MWh	(7.9)
Firm energy load	9,703,046 MWh	9,560,928 MWh	1.5
Peak load (highest single hourly use)	1,714 MW	1,799 MW	(4.7)
	(December 16, 2005)	(January 5, 2004)	
Average number of residential customers  Annual average residential energy	336,363	333,560	0.8
consumption (includes estimated unbilled revenue allocation)	8,785 kWh	8,852 kWh	(0.8)

### TELLING THE STORIES of CITY LIGHT'S PEOPLE



City Light's Human Resources unit, confronting the twin challenges of a skilled-labor shortage and an increase in retirements, began laying the groundwork for attracting and retaining critical new

To that end, the Seattle City Council adopted City Light's proposal for a new electric utility executive compensation program. The legislation enabled City Light to fill the leadership positions for all four of its major business units and nine of 15 director positions.

Another major hurdle was cleared when City Light and the International Brotherhood of Electrical Workers Local 77 concluded lengthy negotiations just before the end of the year with a tentative four-year settlement. The proposed agreement will be considered by the membership in 2006. The utility managed to meet critical customer deadlines during the extended talks. Earlier in the year, the utility and the City of Seattle settled with a coalition of unions that included City Light's other major labor organization, Local 17 of the International Federation of Professional and Technical Engineers.

To help fulfill its social responsibility as a public utility, City Light integrated the City of Seattle's Race and Social Justice Initiative into several of its human resources and business activities, including the director hiring process. The utility also took steps to support and maintain a discriminationfree workplace. Management employees attended training sessions on creating a respectful workplace and preventing harassment. The utility also reached out to "historically underutilized businesses" (HUBs) to increase their participation in City Light work. The utility involved HUBs at a rate of 5.16 percent in 2005, short of its 5.92 percent goal but exceeding the city's overall rate of 4.82 percent.

### CITY LIGHT'S PEOPLE, CITY LIGHT'S WORK

### THEY LIGHT UP OUR LIVES

City Light is responsible for approximately 100,000 streetlights. Crews fix roughly 85 lights each day — about 20,000 to 25,000 lights each year — making their way through the entire system in five years.

It's a daunting, never-ending job, and even more surprising is that all that work is accomplished by a relatively small group about two dozen very dedicated people split into two crews, one based out of the North Service Center and another in the South Service Center.

City Light can't say enough about the importance of their work, and neither can



City Light's apprentice training is among the best in the industry



Streetlight maintenance, circa 1950

the utility's customers. Almost as frequent as the broken-light reports are comments from the public about the great service. Here are just a couple of examples:

One resident called in to ask for repairs to a light on Rainier Avenue South. The caller was concerned because his daughter and other young schoolchildren waited for their school bus there and mornings were dark. When the light got fixed quickly, the customer called back to say this shows City Light "really cares, especially for those kids."

In the fall, City Light heard from a big downtown shopping mall where six streetlights were out, a real concern for security reasons and because of the fast-approaching holiday shopping season. Within two weeks, all the lights were fixed. That customer took the time to write and tell the utility that mall vendors were "very happy" with the crews' quick response.

### RESCUES FROM ON HIGH

It's hard enough to rescue an injured person from a car or a building. Imagine saving someone from the top of a utility pole that includes the added threat of electrocution.

Line crews do imagine what it's like because it's a daily reality in their dangerous jobs,

and so they practice difficult, complex polerescue skills. Some even compete.

Every year they come, pole-rescue teams from across the state to test their skills at the annual Governor's Industrial Safety and Health Conference in Spokane. In 2005, City Light sent a team, but they knew it was going to be tough. City Light hadn't had a win at the state level for a couple of years.

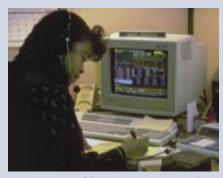
The task all teams had to accomplish in front of judges mimicked real-life emergencies.

First, they must judge hazards to themselves and others, as well as assess injuries. Then they secure and maneuver the injured person from pole to ground while avoiding further injury. Once off the pole, lineworkers perform first aid and CPR.

In 2005, Seattle City Light did place a winning team at the state contest, coming in fourth. They got there thanks to City Light employees who, on their own time, practiced, joined in-house competitions, and offered judging and coaching. Congratulations to the pole-top rescue



Maintaining the distribution system means reliable power for customers



Monitoring state-of-the-art power system controls



winners, Justin Bean and Shawn Runnels, who demonstrated superior skills in this arduous competition.

### REBUILDING ROSS

It's no small task to take apart a 550-ton generator. Quite literally, the whole is a sum of many, many smaller parts. But that (and its re-assembly) is what happened at the Skagit Hydroelectric Project in 2005. Built in 1949 and generating power for more than 50 years, the Ross Powerhouse Unit 42 windings needed rebuilding to ensure reliability.

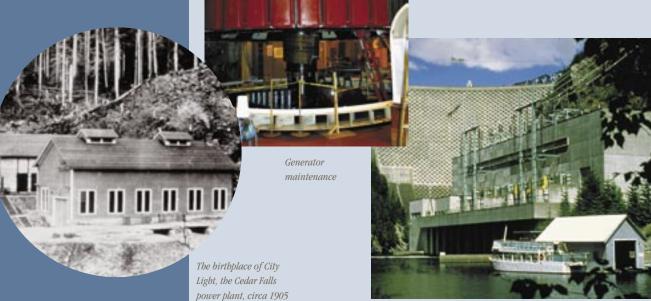
The "exciter," which creates the necessary magnetic field inside the generator, the associated covers, and a host of other equipment all had to be removed before the rotor arm and connecting shaft could be

taken out. Consider that the rotor arm, shaft, and the spinning wheel weigh close to a million pounds, and the challenges become obvious.

Transporting materials was another hurdle. Numerous steel laminates and all the various parts had to be shipped to the Diablo boat landing, then barged up the lake to the powerhouse. Depending on the total weight of the vehicle, materials and supplies, lake elevation was critical for delivery. Coordination between the Power Management and Generation Divisions meant successful shipments.

The Unit 42 rebuild actually started in 2004, when crews pulled the rotor. Then in 2005, a private contractor began its part of the job — installing the core and coil, plus reinsulating field poles. After that, re-assembly crews went to work. It seemed everyone at the Skagit had a piece of this massive project, including the cookhouse crew, who handled changing meal schedules for large numbers of people.

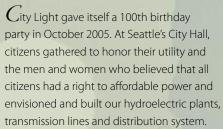
An enormous, detailed job, this rebuild will keep Ross Powerhouse humming for another 50 years. \*



Ross Dam and powerbouse

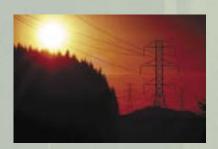
### HAPPY BIRTHDAY, CITY LIGHT





Current City Light employees also honored each other for carrying on that vision and hard work. The men and women of City Light draw inspiration today from their predecessors' achievements. They strive not just to leave to posterity a great institution, but to leave behind a great tradition of high performance and excellent service.

In the pivotal year of 2005, City Light honored the past, took stock of the present, and tried to anticipate the future. The lesson from the people who so ably established and built our utility is summed up by author Michael J. Gelb: "The best way to forecast the future is to create it."





### **EXECUTIVE TEAM and ELECTED OFFICIALS**

**EXECUTIVE TEAM** 

Jorge Carrasco, Superintendent

Bill Gaines, Power Supply and Environmental Affairs Officer

Chris Heimgartner, Customer Service and Energy Delivery Officer

Herb Hogue, Chief Financial Officer

Jean West, Human Resources Officer

Sung Yang, Chief of Staff

### **ELECTED OFFICIALS**



Greg Nickels, Mayor

SEATTLE CITY COUNCIL



Nick Licata, Council President; Chair: Public Safety, Governmental Relations and Arts Committee



Sally Clark, Chair: Economic

Development and Neighborhoods

Committee



Richard Conlin, Chair: Environment, Emergency Management and Utilities Committee



David Della, Chair: Parks, Education, Libraries and Labor Committee



Jan Drago, Chair: Transportation Committee



Jean Godden, Chair: Energy and Technology Committee



Richard McIver, Chair: Finance and Budget Committee



Tom Rasmussen, Chair: Housing, Human Services and Health Committee



Peter Steinbrueck, Chair: Urban Development and Planning Committee